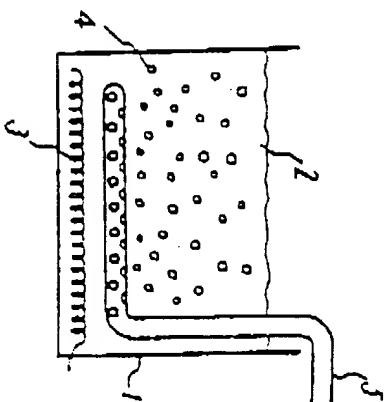


(54) RESIST REMOVING APPARATUS**(11) 1-189921 (A) (43) 31.7.1989 (19) JP****(21) Appl. No. 63-16127 (22) 26.1.1988****(71) MITSUBISHI ELECTRIC CORP (72) KATSUHIKO TAMURA****(51) Int. Cl. H01L21/30, G03C11/00, G03F7/00**

PURPOSE: To prevent decrease of concentration of hydrogen peroxide solution and to enable resist to be removed stably, by dissolving ozone gas in a heated mixture of sulfuric acid and the hydrogen peroxide solution.

CONSTITUTION: Liquid mixture 2 consisting of concentrated sulfuric acid and hydrogen peroxide in proportions of about 4:1 is introduced into a chemical vessel 1 and heated by a heater 3 to a temperature of 100~130°C. Then, ozone gas 4 is fed into the liquid from a bubbler 5. Bubbles of the ozone gas produced thereby are contacted with the heated liquid mixture 2 of the concentrated sulfuric acid and hydrogen peroxide, and a part of the ozone gas is dissolved in the solution. A wafer having resist thereon is dipped in the solution for about 15 minutes, whereby the resist is removed from the wafer. The resist removing solution may be substituted by a mixture of concentrated sulfuric acid and concentrated nitric acid. According to this method, deterioration of capability of removing the resist can be prevented effectively.



127 E 838

BEST AVAILABLE COPY

(54) MANUFACTURE OF SEMICONDUCTOR DEVICE**(11) 1-189922 (A) (43) 31.7.1989 (19) JP****(21) Appl. No. 63-13618 (22) 26.1.1988****(71) MITSUBISHI ELECTRIC CORP (72) KATSUHIKO TAMURA**-dr-
WITTM